# 4-(Trifluoromethyl)umbelliferone

Cat. No.: HY-D0149 CAS No.: 575-03-1 Molecular Formula:  $C_{10}H_5F_3O_3$ Molecular Weight: 230.14

Target: Cytochrome P450

Pathway: Metabolic Enzyme/Protease

Storage: 4°C, protect from light

\* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

**Product** Data Sheet

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: ≥ 100 mg/mL (434.52 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.3452 mL	21.7259 mL	43.4518 mL
	5 mM	0.8690 mL	4.3452 mL	8.6904 mL
	10 mM	0.4345 mL	2.1726 mL	4.3452 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.25 mg/mL (5.43 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 1.25 mg/mL (5.43 mM); Suspended solution; Need ultrasonic

## **BIOLOGICAL ACTIVITY**

Description

 $4- (Trifluoromethyl) umbelliferone is fluorescent probe substrate for rat hepatic cytochrome P450\ enzymes \ [1].$ 

### **REFERENCES**

[1]. Renwick AB, et, al. Evaluation of 7-benzyloxy-4-trifluoromethylcoumarin, some other 7-hydroxy-4-trifluoromethylcoumarin derivatives and 7-benzyloxyquinoline as fluorescent substrates for rat hepatic cytochrome P450 enzymes. Xenobiotica. 2001 Dec;31(12):861-78.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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